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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,856	01/04/2001	Andrew J. Hazelton	PA0321-US / 11269.24	3987
7590 10/14/2003			EXAMINER	
Steven G. Roeder THE LAW OFFICES OF STEVEN G. ROEDER 5560 Chelsea Avenue La Jolla, CA 92037			JONES, JUDSON	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 10/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/754,856	Applicant(s) HAZELTON ET AL.	
	Examiner Judson H Jones	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>0401</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 22 is objected to because of the following informalities: There is no antecedent basis for the first core, the conductor or the actuator combination. These features are recited in claim 17, but claim 22 does not depend on claim 17. Appropriate correction is required.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese reference 54044710 A. The Japanese reference discloses in figure 6 a tubular conductor 1, a circulation housing 2 and a fluid as described in the abstract. (A translation of the Japanese reference will be included in the next office action.)

In regard to claims 2-7 and 27-29, see element 15 in the Japanese reference figure 6.

In regard to claims 8 and 9, see the Japanese reference 1 where the inner shell is viewed as being the housing part closest to core 9 and the outer shell is viewed as being the housing part closest to core 3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11-26 and 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuan et al. 6,069,417 A in view of the Japanese reference. Yuan et al. teaches that E/I core actuators are well known in the art in column 2 lines 21-34 and also teaches in column 1 lines 28-35 that heat from conductors interferes with positional accuracy for stage devices. Since the Japanese reference and Yuan et al. are from the same field of endeavor and also since Yuan et al. does not disclose a cooling system for the stage device, it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized the conductor cooling system of the Japanese reference in order to improve the performance of the E/I core stage device of Yuan et al.

In regard to claims 13-16, 23-26, 32, 33, 35 and 36 see Yuan et al. column 1 lines 11-20.

In regard to claims 18-20, see element 15 in the Japanese reference figure 6.

In regard to claim 31, see Yuan et al. column 2 lines 43-45.

In regard to claim 34, see Yuan et al. figure 2.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese reference in view of Yamaguchi 6,112,531 A. The Japanese reference discloses a method of cooling a tubular shaped conductor but does not disclose any feedback means for controlling the temperature of the device. Yamaguchi teaches feedback of a cooling system in column 7 lines

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32-41 by means of temperature sensors in the wall of tubular members enclosing conductors.

Since Yamaguchi and the Japanese reference are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized feedback means in the device of the Japanese reference in order to maintain the device at the desired temperature by placing temperature sensors on the wall of a tubular member enclosing the conductor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judson H Jones whose telephone number is 703-308-0115. The examiner can normally be reached on 8-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JHJ
9/20/2003

KARL TAMAI
PRIMARY EXAMINER